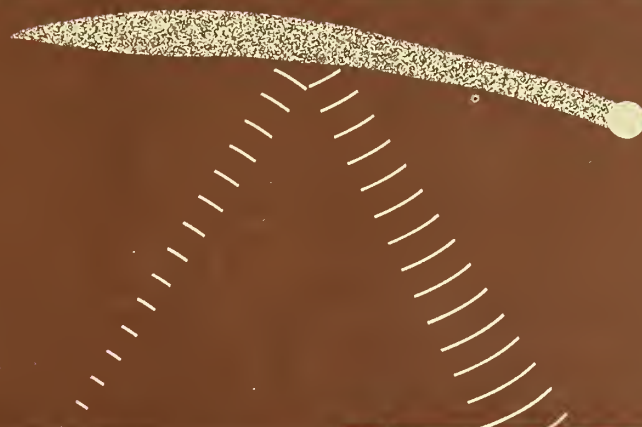


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WATER SUPPLY OUTLOOK FOR OREGON



U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with
OREGON DEPARTMENT OF WATER RESOURCES

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
MAY 1, 1978

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SOME OF THE DATA IN THIS REPORT HAVE BEEN RECEIVED THROUGH THE SOIL CONSERVATION SERVICE'S NEW SNOTEL SYSTEM WHICH TRANSMITS INFORMATION VIA THE SPACE AGED METEOR BURST METHOD FROM DATA SITES TO MASTER STATIONS LIKE THESE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bazeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1220 S.W. Third Ave., Portland, Oregon 97204
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MAY 8, 1978

Issued by

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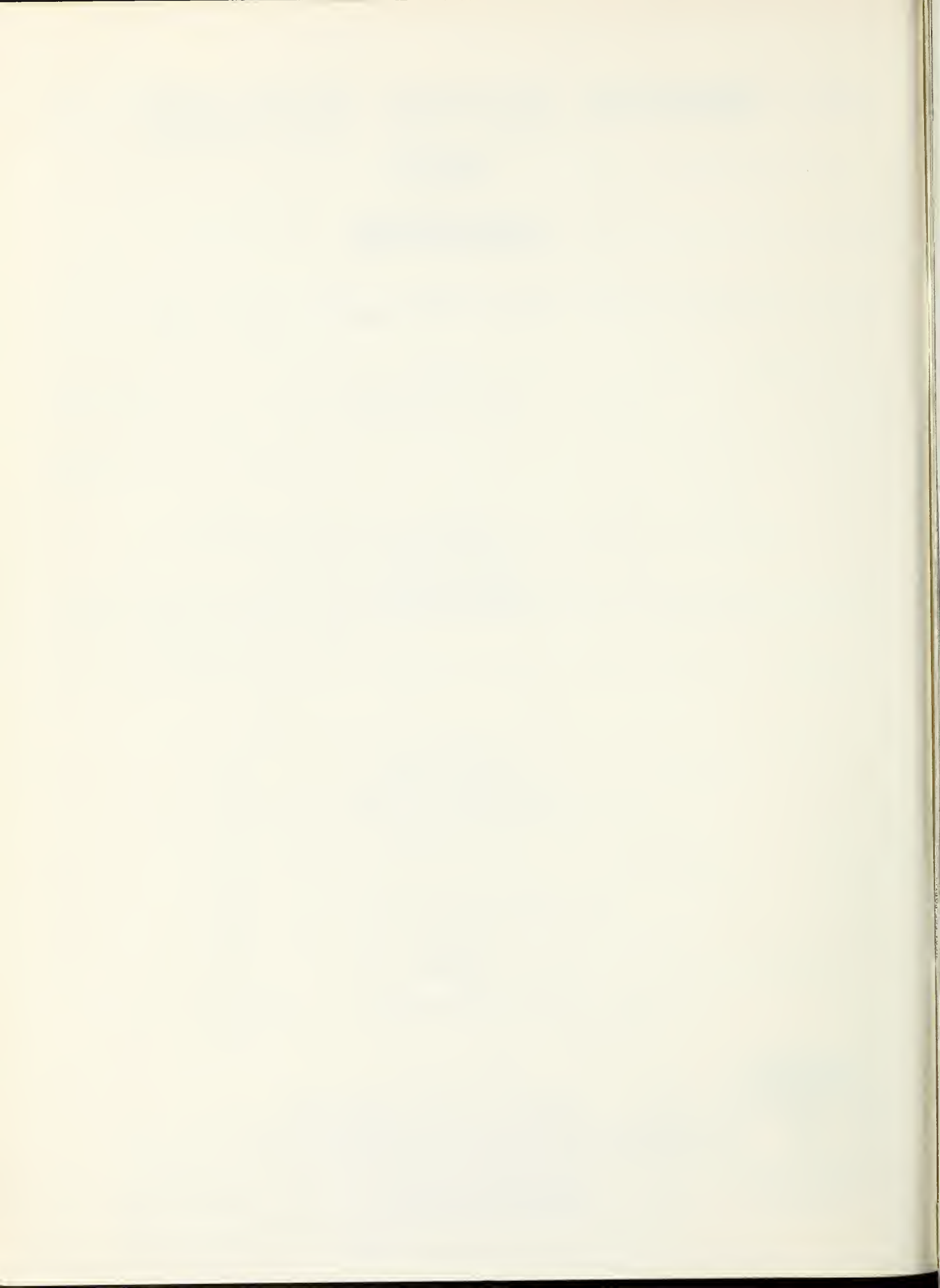


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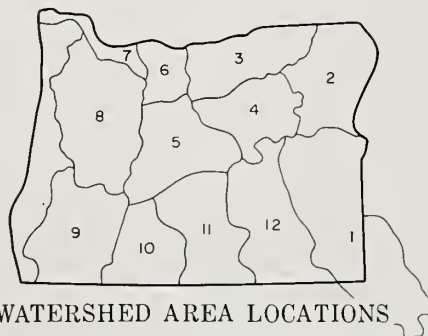
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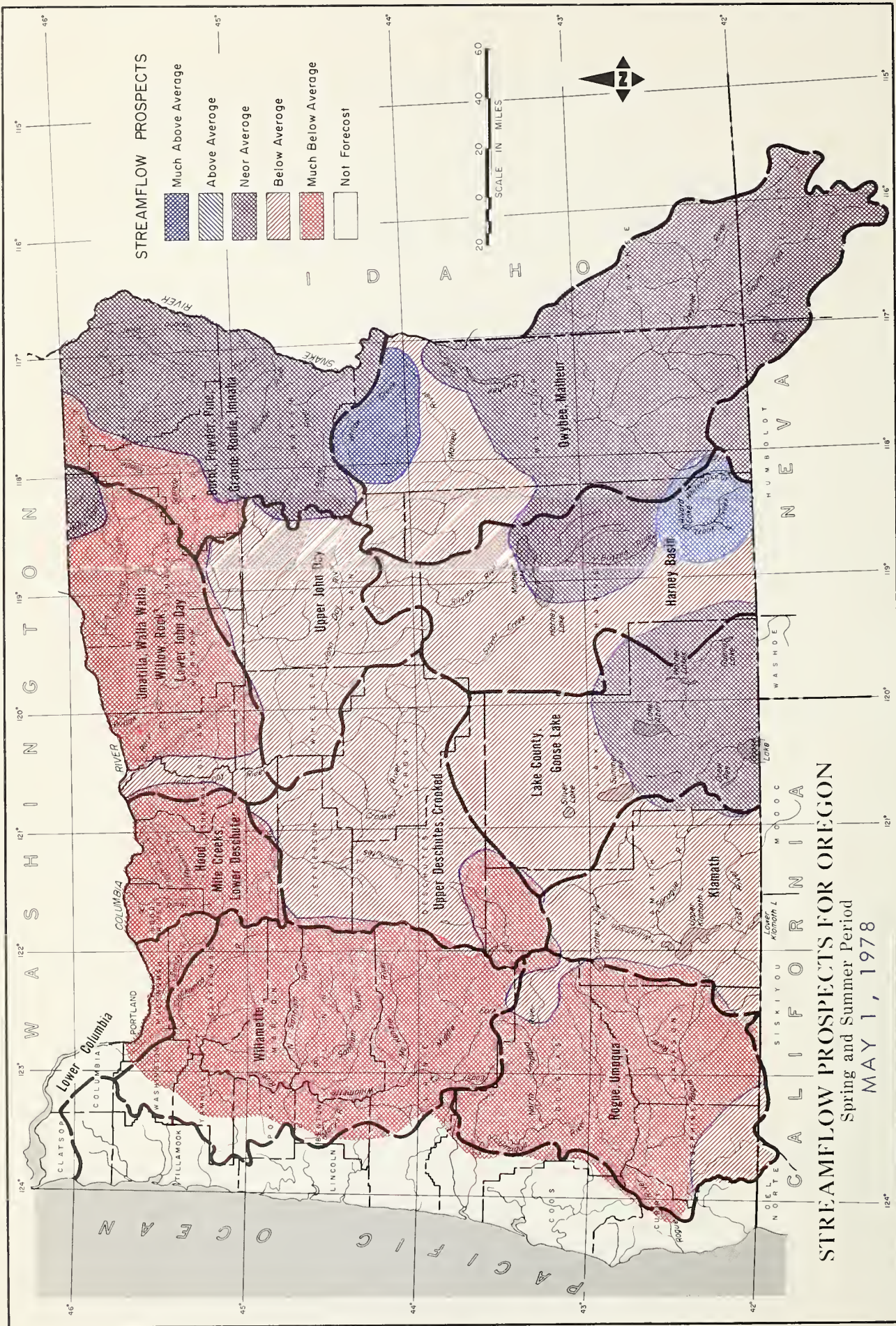
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	II	SOIL MOISTURE
	III	PRECIPITATION

MAP AND INDEX OF OREGON SNOW COURSES.....(MAP)

LIST OF COOPERATORS.....INSIDE BACK COVER



WATERSHED AREA LOCATIONS



WATER SUPPLY OUTLOOK for OREGON

M A Y 1, 1 9 7 8

The water supply outlook is good for most Oregon water users. Late season shortages will occur for users who divert directly from streams except in the extreme eastern fourth of the state. Reservoir storage is excellent and rains during April were above normal in all areas.

SNOW COVER

A poor snow cover generally exists in the state. The snowpack is 25 to 65% of average in the Cascades, 85% of average in the Siskiyou and 35 to 55% in most areas of eastern Oregon. The Wallowa Mountains and the Owyhee drainage are the only areas with normal snow cover for this time of year.

PRECIPITATION

April showers were plentiful with all areas of Oregon receiving above normal amounts of rain. Precipitation ranged from a low of 110% to 115% in the Hood and Rogue River basins to a high of three and one half times normal in Malheur county.

SOIL MOISTURE

Mountain watershed soil moisture is average to above for May 1.

RESERVOIR STORAGE

Reservoir storage is normal or above in all of the principal irrigation reservoirs. Twenty five of these reservoirs are storing 2,628,000 acre feet. This is 107% of the May 1 average.

- continued on next page -

STREAMFLOW

Eastern Oregon streams responded to the heavy April rains. Streams originating in the Cascades did not however, as the rains are still replenishing ground water supplies. Forecasts of spring and summer volumes of streamflow for representative Oregon streams are as follows:

<u>STREAM</u>	<u>PERIOD</u>	<u>FORECAST</u> <u>% 1958-72 AVG.</u>
Owyhee net Inflow	May-Sept	105
Malheur near Drewsey	May-Sept	85
Deschutes at Benham Falls	May-Sept	81
Grande Ronde at La Grande	May-Sept	60
Willamette, Mid. Fk. near Oakridge	May-Sept	68
Upper Klamath Lake Inflow	May-Sept	85
Rogue near Raygold	May-Sept	66
Silvies near Burns	May-Sept	70

This report contains data furnished by the Oregon Department of Water Resources, U. S. Geological Survey, NOAA National Weather Service and other cooperators.



WATER SUPPLY OUTLOOK

OWYHEE, MALHEUR WATERSHEDS

OREGON

GENERAL OUTLOOK

WATER SUPPLIES FOR THE OWYHEE-MALHEUR SHOULD BE ADEQUATE. STREAMFLOW FORECASTS IN THIS AREA RANGE FROM 85% OF NORMAL ON THE MALHEUR NEAR DREWSEY TO 305% OF NORMAL ON BULLY CREEK AT WARMSPRINGS. SNOW COVER IS VARIABLE. SNOW HAS MELTED AT ELEVATIONS BELOW 5500 FEET. HEAVY PRECIPITATION, 344% OF NORMAL FOR APRIL, HAS PRODUCED HIGH RUNOFF. RESERVOIR STORAGE IS ABOVE AVERAGE WITH SOME RESERVOIRS SPILLING. SOILS ARE GENERALLY WELL RECHARGED.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD		
	FORECAST		THOUSAND ACRE FEET		
	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^c
Bully Creek	40.0	305	March-May		13.1
Malheur near Drewsey	27	85	May-July		32
	28	85	May-Sept		33
Malheur, North Fork at Beulah	32	92	May-July		35
	37	92	May-Sept		40
Owyhee Reservoir net Inflow	166	105	May-July	51	157
	183	105	May-Sept	72	180

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000 250	June 1 June 26	May 24 June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Beulah Reservoir	60.0	59.7	25.1	51.2
Bully Creek	30.0	29.2	14.0	24.1
Owyhee	715.0	715.5	484.9	563.8
Warm Springs	191.0	151.0	73.3	140.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
Malheur River	1	160	96

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Bully Creek		--	--
Jordan Creek		--	--
Malheur River	3	--	45
Owyhee River	4	--	102

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

GENERAL OUTLOOK

NO SERIOUS WATER SHORTAGES ARE EXPECTED IN THIS AREA. STREAMFLOW FORECASTS RANGE FROM 60% OF NORMAL ON THE GRANDE RONDE AT LA GRANDE TO 110% ON THE WALLOWA NEAR JOSEPH. SNOW HAS GENERALLY MELTED BELOW 5500 FEET ELEVATION. SNOW COURSES ABOVE 5500 FEET STILL AVERAGE 80% TO 100% WATER EQUIVALENT. APRIL PRECIPITATION WAS 294% OF AVERAGE. RESERVOIR STORAGE IS ABOVE AVERAGE. SOIL MOISTURE CONTENT IS ALSO ABOVE AVERAGE.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average c
Bear near Wallowa	57	98	May-Sept		58
Burnt near Hereford	14.5	105	May-July		13.8
	15.5	105	May-Sept		14.8
Catherine near Union	52	98	May-Sept		53
Eagle Creek abv. Skull Creek	146	96	May-July		152
	162	97	May-Sept		166
Grande Ronde at La Grande	55	60	May-July	41	92
	58	60	May-Sept	45	96
Hurricane near Joseph	44	98	May-Sept		44
Imnaha at Imnaha	266	105	May-Sept		253
Lostine near Lostine	111	95	May-Sept		117
Powder near Sumpter	38	95	May-July		40
	39	95	May-Sept		41
Wallowa, East Fork near Joseph	8.3	98	May-July		8.5
	10.5	98	May-Sept		10.7
Wallowa near Joseph	77	110	May-July		70
Wolf Creek net Inflow	5.5	72	May-June		7.6

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average c
Phillips Lake	73.5	51.3	46.7	--
Thief Valley	17.4	17.4	17.4	17.5
Unity	25.2	25.7	15.8	25.1
Wallowa Lake	37.5	28.0	29.6	26.2
Wolf Creek	10.4	11.1	7.9	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average c
Burnt River	4	479	88
Grande Ronde River above La Grande	4	0	0
Powder River	5	5767	81
Wallowa, Imnaha, Catherine Creek	6	680	101

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average c
Burnt, Powder	1	292	112
Grande Ronde, Catherine Creek, Imnaha River	3	114	102

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

GENERAL OUTLOOK

SOME WATER SHORTAGES MAY BE EXPECTED IN THIS AREA IN LATE SEASON. STREAMFLOW FORECASTS RANGE FROM 50% TO 86% OF AVERAGE. THE REMAINING SNOWPACK IS ONLY 36% TO 52% OF NORMAL ON MAJOR DRAINAGES. APRIL PRECIPITATION WAS 189% OF AVERAGE. MAJOR RESERVOIRS REPORT AVERAGE OR ABOVE STORAGE. SOIL MOISTURE IS WELL RECHARGED.

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SCALE 1:1,500,000



LEGEND

- Watershed Boundary
- County Boundary
- ▲ Forecast Point
- Snow Course
- ▲ Soil Moisture Station
- Precipitation Gage
- ⚡ Radio Telemetry

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average C
BASIN, STREAM and/or FORECAST POINT.					
Birch Creek at Rieth	3.5	50	May-July		7.1
Butter Cr. near Pine City	2.0	60	May-July		3.4
McKay near Pilot Rock	4.4	50	May-Sept		8.8
Umatilla near Gibbon	22	57	May-July		39
	27	60	May-Sept		45
Umatilla at Pendleton	37	55	May-July		68
Walla Walla, South Fork near Milton	44	86	May-Sept		51

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	May 28	May 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Cold Springs	50.0	49.5	28.8	49.5
McKay	73.8	68.5	29.6	57.6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
Umatilla, Walla Walla, McKay Creek	3	112	100

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
McKay Creek	3	--	36
Umatilla River	3	--	52
Walla Walla River	2	--	46

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

NO SERIOUS WATER SHORTAGES ARE ANTICIPATED. FORECASTS ARE FOR 80% TO 85% OF NORMAL STREAMFLOW. THE SNOWPACK REMAINING IS AT HIGHER ELEVATIONS AND IS 55% TO 64% OF NORMAL OVER THE AREA. APRIL PRECIPITATION WAS 245% OF AVERAGE. SOIL MOISTURE RECHARGE IS GOOD.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c
Camas Creek near Ukiah	12.9	80	May-July		16.2
	13.3	80	May-Sept		16.7
John Day, Middle Fork at Ritter	56	80	May-July		67
	57	80	May-Sept		70
John Day, North Fork at Monument	272	80	May-July		340
	283	80	May-Sept		354
Strawberry near Prairie City	5.5	85	May-July		6.5
	6.1	85	May-Sept		7.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
John Day above Dayville	3	132	97
John Day, North Fork	2	125	100

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
John Day, North Fork	7	653	55
John Day abv. Dayville	4	--	41

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS

OREGON

GENERAL OUTLOOK

SOME LOCAL WATER SHORTAGES MAY EXIST IN LATE SEASON WHERE THE ONLY WATER SOURCE IS DIRECT DIVERSION FROM STREAM CHANNELS. WATER SUPPLY FORECASTS RANGE FROM 35% AT CRESCENT LAKE TO 85% ON THE CROOKED RIVER. SNOWPACK WATER EQUIVALENT RANGES FROM NEAR ZERO TO 64% OF AVERAGE ON THE AREA SNOWCOURSES. APRIL PRECIPITATION WAS 258% OF AVERAGE. RESERVOIR STORAGE IS ABOVE AVERAGE IN MAJOR IMPOUNDMENTS. SOIL MOISTURE IS WELL RECHARGED.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average	PERIOD	Last Year Average ^c
Beaver Creek near Paulina	3.1	70	May-July	4.4
	3.2	70	May-Sept	4.6
Crane Prairie Reservoir total Inflow	51	80	May-July	64
	82	78	May-Sept	105
Crescent at Crescent Lake	5.5	35	May-July	15.6
	6.9	35	May-Sept	19.6
Crooked near Post	28	85	May-Sept	32
Deschutes at Bend	119	--	Aug-Sept	--
Deschutes at Benham Falls	216	77	May-July	281
	380	81	May-Sept	471
Deschutes below Snow Creek	45	80	May-Sept	56
Deschutes, Little near La Pine	34	58	May-July	53
	43	53	May-Sept	63
Ochoco Reservoir net Inflow	6.9	75	May-Sept	9.2
Odell near Crescent	14.5	63	May-Sept	23
Squaw near Sisters	37	80	May-Sept	46
Tumalo near Bend	29	75	May-Sept	39

FORECAST DATE OF LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	<u>1</u> /	July 15
Crooked R. near Post	100	May <u>20</u>	June 1
Deschutes at Bend	1500	<u>2</u> /	July 1
Little Deschutes near La Pine	400	<u>3</u> /	June 7
	200	June 3	July 8
<u>1</u> / Inflow should be less than 300 cfs.			
<u>2</u> / Flow will not be as great as 1500 cfs.			
<u>3</u> / Flow will not be as great as 400 cfs.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
Crooked R., Upper Deschutes River	1	120	93

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Crane Prairie	55.3	50.7	43.0	42.4
Crescent Lake	86.9	54.6	70.4	52.3
Ochoco	47.5	47.3	23.0	36.8
Prineville	153.0	161.8	99.2	146.8
Wickiup	200.0	197.0	183.4	188.5

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged ^d	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Crooked, Ochoco	1	0	0
Deschutes abv. Wickiup	2	209	64
Little Deschutes	4	151	48
Tumalo & Squaw Crs.	3	279	51

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES
WATERSHEDS
OREGON

GENERAL OUTLOOK

WATER SUPPLIES MAY BE SOMEWHAT LIMITED IN LATE SEASON IN THIS AREA. FORECASTS ARE FOR 62% TO 74% OF AVERAGE STREAMFLOW. THE REMAINING SNOWPACK IS ABOUT 54% OF NORMAL. APRIL PRECIPITATION WAS ABOVE AVERAGE AT 110%. CLEAR LAKE REPORTS ABOVE AVERAGE STORAGE.



STREAMFLOW FORECASTS

STREAMFLOW FORECASTS			THIS YEAR		PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET		
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c	
Hood, West Fork near Dee	58	68	May-July		85	
	79	74	May-Sept		107	
White below Tygh Valley	49	63	May-July		79	
	59	62	May-Sept		94	

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*33	July 15-31	**39
* Average cfs forecast to flow for this two-week period. ** Average cfs for period of record.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Clear Lake (Wasco)	11.9	4.7	5.1	4.6

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Hood River	3	144	54
White River	3	144	54

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

This map illustrates the Columbia River Watershed, spanning from the Pacific Ocean in the west to the Washington-Clackamas border in the east. The river is shown in blue, with major tributaries like the Lewis and Clackamas rivers. Major cities such as Portland, Vancouver, and Astoria are marked. The map includes a legend for various monitoring stations: forecast points (blue triangles), snow courses (red dots), aerial markers (red crosses), soil moisture stations (red flags), precipitation gauges (red L-shaped symbols), temperature gauges (red circles with a vertical line), radio telemetry (red lightning bolts), and river miles (circles with numbers). A scale bar at the top right indicates a scale of 1:1,200,000, and a north arrow is located on the right side. The map also shows the Pacific Ocean to the west and the Washington-Clackamas border to the south.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Sandy River	2	144	54

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c
Columbia at The Dalles*	68,500	89	May-July		76,815
	82,500	90	May-Sept		91,550
Sandy River near Marmot	154	68	May-July		227
	196	70	May-Sept		282
* This is a National Weather Service forecast.					

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW ^d (1,000 A F)			REGULATED PEAK (1,000 cfs)	DATE
	APR — SEPT.	APR — JUNE	MAY — JUNE		
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,408	65,112	622	June 10
1968	89,000	55,500	47,900	404	June 13
1969	112,300	85,700	63,800	515	May 15
1970	88,100	62,800	55,200	425	May 28
1971	122,900	88,400	73,700	557	May 13
1972	134,700	96,400	81,400	619	June 20
1958-72 Avg.	104,300	72,900	59,900	529	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu)	FLOW AT THE DALLES (1,000 cfs)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

FORECASTS ARE FOR MUCH BELOW NORMAL STREAMFLOW IN THE WILLAMETTE WATERSHED. STREAMFLOW SHOULD RANGE FROM 58% TO 70% OF AVERAGE. SOME WATER SUPPLY PROBLEMS MAY BE ENCOUNTERED. THE 153% OF AVERAGE APRIL PRECIPITATION WAS A HELP BUT DID NOT SOLVE THE PROBLEM. MOST MAJOR RESERVOIRS ARE NOT UP TO AVERAGE STORAGE. THE SNOWPACK RANGES FROM NEAR ZERO ON THE CLACKAMAS RIVER TO 42% ON THE ROW.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT ¹	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c
Clackamas at Estacada	268	60	May-July		447
	326	58	May-Sept		562
Clackamas above three Lynx	206	60	May-July		343
	270	61	May-Sept		440
McKenzie at McKenzie Bridge	214	65	May-July		329
	308	65	May-Sept		474
McKenzie near Vida	468	65	May-July		720
	616	65	May-Sept		947
McKenzie, So. Fork near Rainbow	90	64	May-July		140
	110	65	May-Sept		169
Oak Grove Fork above Power Intake	55	62	May-July		89
	81	63	May-Sept		128
Row near Dorena	37	70	May-July		53
	41	70	May-Sept		58
Santiam, North at Mehama	320	65	May-July		493
	390	65	May-Sept		600
Santiam, South at Waterloo	203	63	May-July		323
	248	65	May-Sept		382
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge	314	68	May-July	355	462
	382	68	May-Sept	432	562
Willamette, No. Fk. of Mid. Fk. near Oakridge	79	65	May-July		121
	97	68	May-Sept		141
Willamette at Salem	1702	65	May-July		2619
	2057	65	May-Sept		3165

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Clackamas River	2	0	0
McKenzie River	3	96	34
Row River	2	111	42
Santiam River	4	150	28
Willamette, Mid. Fk.	3	102	23

RESERVOIR STORAGE (Thousand Ac. Ft.)

END OF MONTH

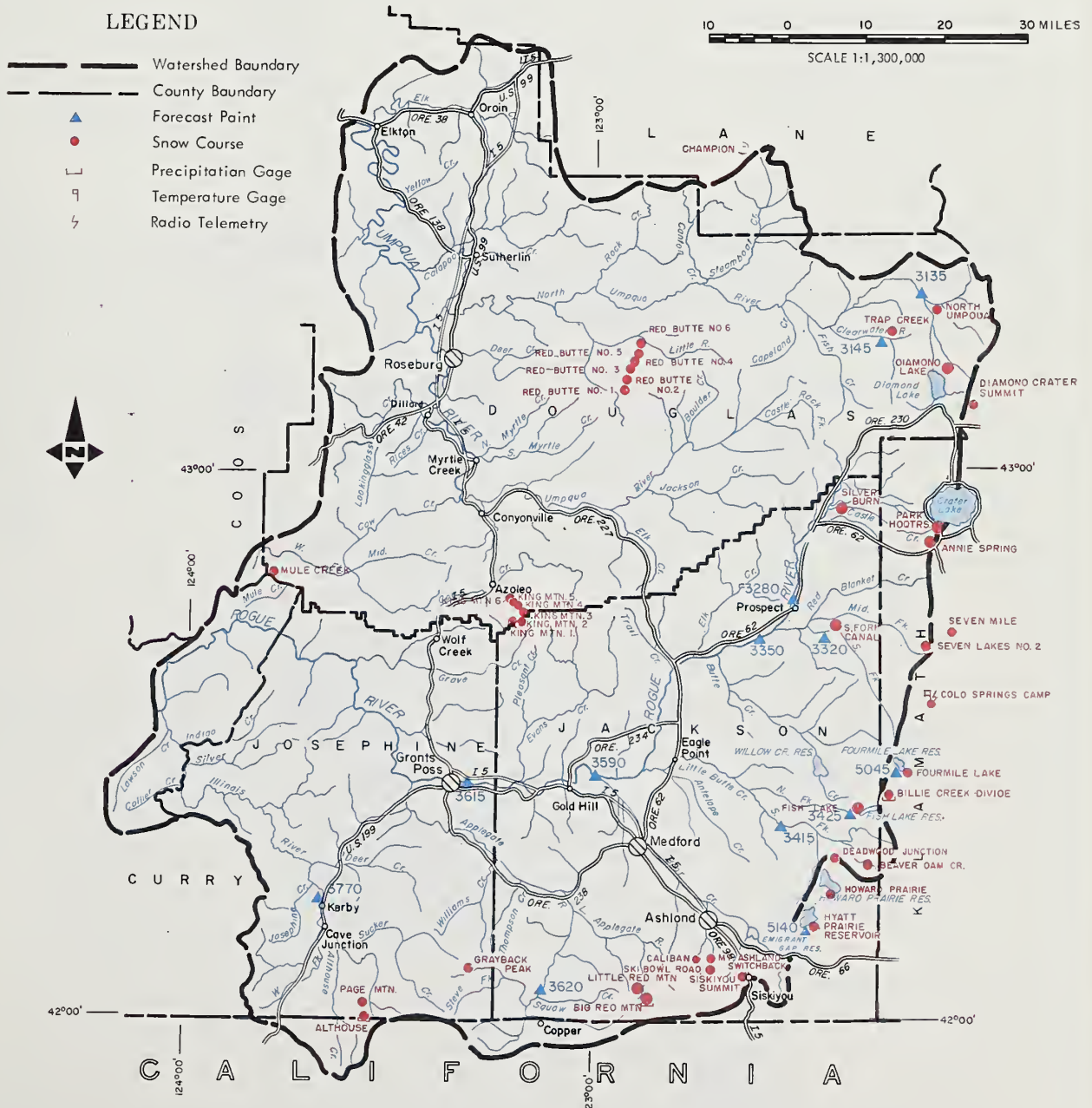
RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Blue River	85.6*	59.7	73.6	--
Cottage Grove	30.0*	23.7	22.1	23.4
Cougar	155.2*	94.1	86.5	108.6
Detroit	299.9*	172.2	193.6	250.2
Dorena	70.5*	55.6	63.2	54.8
Fall Creek	115.0*	74.0	74.7	96.7
Fern Ridge	94.2*	77.8	41.3	86.7
Foster	30.0*	11.6	24.2	18.6
Green Peter	270.0*	158.3	218.8	199.9
Hills Creek	200.0*	147.3	61.2	157.9
Lookout Point	337.2*	143.1	131.4	257.5
Timothy Lake	61.7	56.6	49.5	57.5
Henry Hagg Lake	53.0	53.5	34.2	--
* Multiple purpose reservoir--space reserved primarily for flood runoff.				

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

GENERAL OUTLOOK

SOME WATER SHORTAGES MAY BE EXPERIENCED IN THIS AREA. STREAMFLOW FORECASTS ARE GENERALLY 65% TO 85% OF AVERAGE. THE LOW FORECAST IN THE AREA IS FOR 45% OF NORMAL INFLOW TO HYATT PRAIRIE RESERVOIR. THE SNOWPACK REMAINING IS 20% TO 63% OF NORMAL ON MAJOR DRAINAGES. APRIL PRECIPITATION WAS 115% OF NORMAL. AREA RESERVOIRS REPORT NEAR OR ABOVE AVERAGE STORAGE.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average	PERIOD	Last Year
Applegate near Copper	65	80	May-July	81
	70	80	May-Sept	87
Clearwater above Trap Creek	46	80	May-Sept.	57
Fourmile Lake net Inflow	2.1	70	May-July	3.0
Hyatt Reservoir net Inflow	1.0	45	May-July	2.2
Illinois River near Kerby	77	85	May-July	91
	82	85	May-Sept	97
Little Butte, N. Fk. at Fish Lake nr. Lake Cr.	9.3	80	May-Sept	11.6
Little Butte, S. Fk. near Lake Creek	9.7	60	May-July	16.1
	12.0	65	May-Sept	18.4
Rogue above Prospect	117	64	May-July	184
	159	66	May-Sept	239
Rogue, South Fork near Prospect	30	65	May-July	46
	36	65	May-Sept	56
Rogue at Raygold near Central Point	325	66	May-July	301
	428	66	May-Sept	429
Rogue at Grants Pass	412	66	May-Sept	627
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls	118	85	May-Sept	139

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	May 15	May 27

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	END OF MONTH		
		This Year	Last Year	Average c
Emigrant Lake	39.0	38.8	28.5	37.0*
Fish Lake	8.0	5.3	6.4	6.0
Fourmile Lake	16.1	8.5	10.6	10.7
Howard Prairie	60.0	48.1	33.7	44.9
Hyatt Prairie	16.1	14.0	10.8	14.0
* Average for years of record (in base period) after re-construction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average c
Applegate		--	--
Bear Creek	1	558	89
Butte Creek	4	393	20
Illinois River		--	--
North Umpqua	3	438	54
Rogue River	4	388	63

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

GENERAL OUTLOOK

NO SERIOUS WATER SHORTAGES ARE ANTICIPATED WHERE ACCESS TO STORED WATER IS AVAILABLE. STREAMFLOW IS FORECAST TO BE 75% TO 85% OF NORMAL ON THE MAJOR STREAMS. APRIL PRECIPITATION WAS HEAVY AT 255% OF AVERAGE. THE REMAINING SNOWPACK IS GENERALLY HALF OF AVERAGE AND RESTRICTED TO HIGH ELEVATIONS. RESERVOIR STORAGE IS NOT QUITE AVERAGE FOR MAY 1. SOIL MOISTURE IS REPORTED AS NORMAL.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c
Clear Lake Reservoir Inflow	12.1	80	May-Sept		15.1
Gerber Reservoir Inflow	3.8	80	May-Sept		4.8
Sprague near Chiloquin	124	75	May-Sept		166
Upper Klamath Lake net Inflow	300	85	May-Sept	223	353
Williamson below Sprague River	244	85	May-Sept	190	287

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
Upper Klamath	1	146	104

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ^c
Clear Lake	440.2	229.7	195.3	266.5
Gerber	94.0	68.0	32.6	68.5
Upper Klamath Lake	584.0	488.9	454.3	517.4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Lost River	2	--	134
Sprague River	2	13200	85
Upper Klamath	5	1196	57
Williamson River	2	1200	42

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

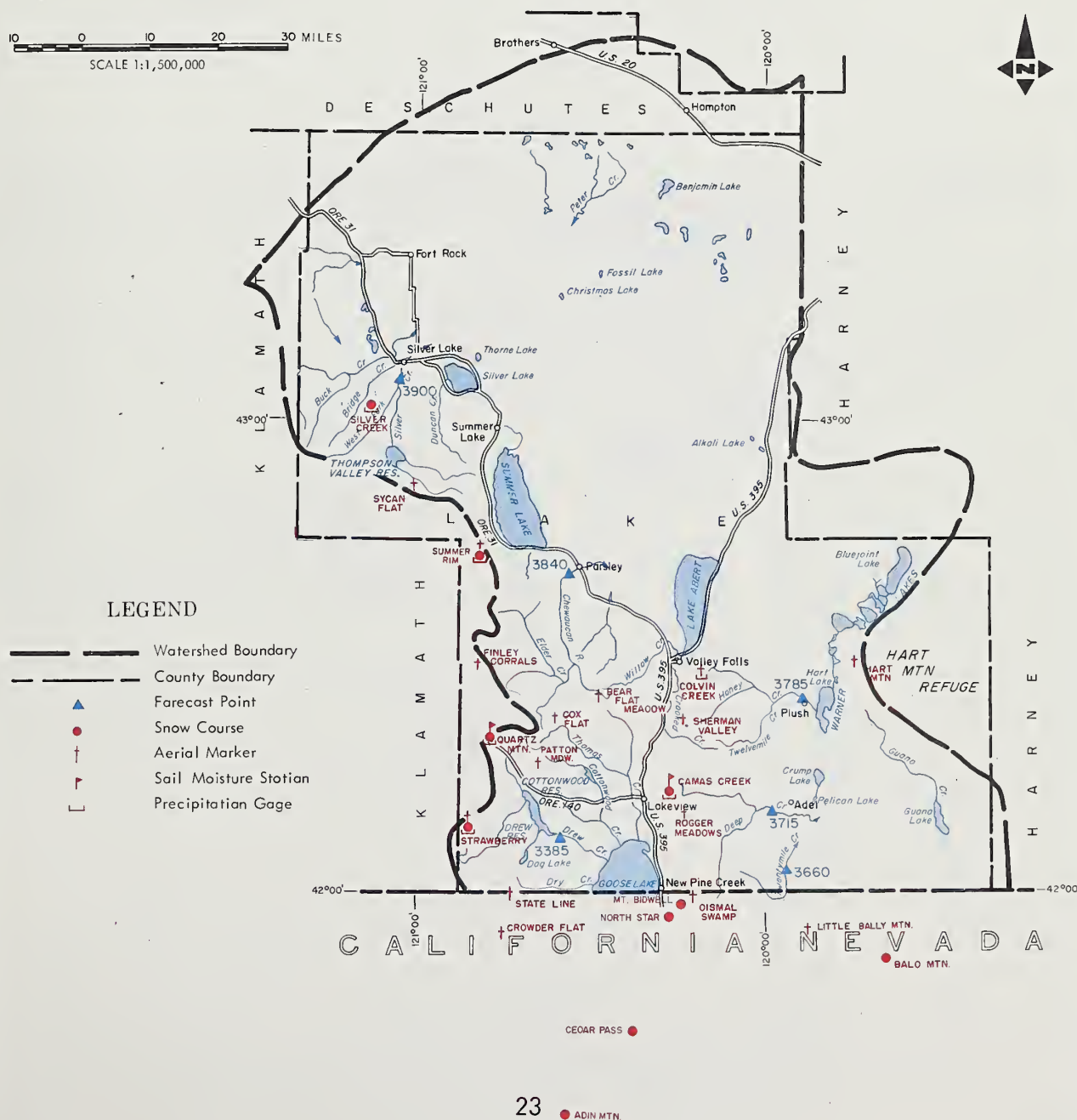
WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS

OREGON

GENERAL OUTLOOK

STREAMFLOW FORECASTS IN THIS AREA RANGE FROM 70% TO 90% OF AVERAGE. ANY WATER SHORTAGES WILL PROBABLY BE LOCALIZED PROBLEMS. RESERVOIRS REPORT ABOVE AVERAGE STORAGE. APRIL PRECIPITATION WAS 286% OF AVERAGE. THE SNOWPACK IS RESTRICTED TO HIGH ELEVATIONS. FEW SNOWCOURSES REPORTED SNOW ON THE GROUND ALTHOUGH SOME THAT DID WERE ABOVE AVERAGE.



STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average C
BASIN, STREAM and/or FORECAST POINT					
Chewaucan near Paisley	48	85	May-July	6.7	56
	51	85	May-Sept	9.1	60
Deep above Adel	37	85	May-July		43
	38	85	May-Sept		45
Drews Reservoir net Inflow	7.7	80	May-July		9.7
Honey Creek near Plush	9.0	80	May-July		11.3
	9.1	80	May-Sept		11.4
Silver Creek near Silver Lake	7.5	70	May-July		10.7
Twentymile near Adel	10.0	90	May-Sept		11.1

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average C

Chewaucan, Silver Creek, Drew Creek	1	146	104
Honey, Deep, 20-Mi. Cr.	1	124	94

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	END OF MONTH		
		Usable Storage		
		This Year	Last Year	Average C

Cottonwood	8.7	8.7	2.0	6.7*
Drews	63.0	58.0	22.0	55.3
Thompson Valley		No Rpt.		

* Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

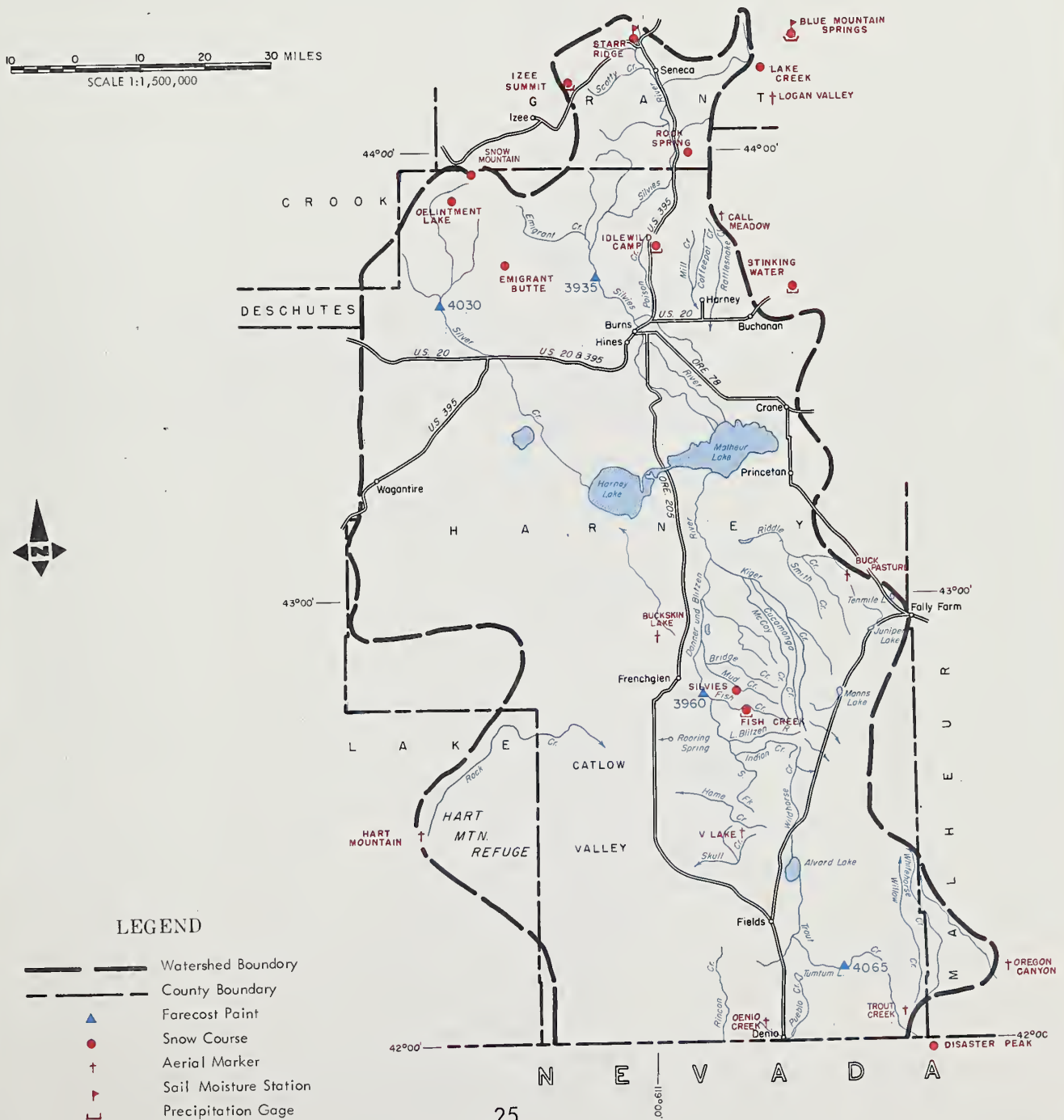
(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average C

Chewaucan River	3	13500	84
Deep Creek	2	--	114
Drew Creek	2	0	0
Honey Creek	1	30200	83
Silver Creek		--	--
Twentymile Creek		--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

NO SERIOUS WATER SHORTAGES ARE EXPECTED. WATER SUPPLY FORECASTS RANGE FROM 70% TO 150% OF NORMAL. THE SNOWPACK IN THIS AREA AVERAGES ABOUT 37% OVER THE BASIN ALTHOUGH LOCAL AREAS MAY BE HIGHER. APRIL PRECIPITATION WAS HIGH AT 295% OF AVERAGE. SOIL MOISTURE CONDITIONS ARE REPORTED AS ABOVE AVERAGE.



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ^c
Donner und Blitzen near Frenchglen	41	110	May-July		37
	44	105	May-Sept		42
Silver near Riley	3.6	70	May-July		5.1
Silvies River near Burns	23	70	May-July	4.3	33
	24	70	May-Sept	8.4	35
Trout Creek near Denio	8.7	150	May-July		5.8
	9.3	150	May-Sept		6.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ^c
Silvies River, Silver Cr.	1	121	102

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ^c
Donner und Blitzen R.		--	--
Silver Creek		--	--
Silvies River	4	--	37
Trout Creek		--	--

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 1

MAY 1, 1978

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.C
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)		No	Rpt.	--	--
Battle Creek (Ida.)***		e		--	--
Bear Creek (Nev.)	4/24	57	27.7	8.2	20.1
Big Bend (Nev.)	4/24	6	2.8	0.0	1.3
Blue Mountain Springs	4/28	11	4.7	0.0	10.2
Blue Mtn. Springs Pillow		No	Rpt.		
Buck Pasture***		e		--	--
Buckskin, Lower (Nev.)		e		0.0	--
Buckskin, Upper (Nev.)		e		0.0	--
Bull Basin (Ida.)***		e		--	--
Bully Creek***		e		--	--
Call Meadow***		e		--	--
Columbia Basin (Nev.)***		e		--	--
Cottonwood-Indian***		e		--	--
Disaster Peak (Nev.)		e		--	--
Eldorado Pass	4/28	0	0.0	0.0	0.0
Fawn Creek (Nev.)		e		--	--
Fish Creek		e		--	--
Fish Creek***		e		--	--
Fish Creek Pillow		e		--	--
Flag Prairie***		e		--	--
Fox Creek (Nev.)		e		--	--
Fry Canyon (Nev.)	4/24	0	0.0	0.0	1.1
Gold Creek (Nev.)	4/24	0	0.0	0.0	0.3
Granite Peak (Nev.)		e		--	--
Hyde Pasture (Ida.)		e		--	--
Jack Creek, Lower (Nev.)	4/24	0	0.0	--	0.1
Jack Creek, Upper (Nev.)	4/24	9	4.2	--	3.4
Jack Peak (Nev.)	4/24	73	30.2	12.9	26.7
Lake Creek R.S.		e		--	--
Lake Creek R.S. Pillow	4/28	--	0.0	--	--
Laurel Draw (Nev.)***	4/24	0	0.0	0.0	--
Logan Valley***		e		--	--
Lookout Butte***		e		--	--
Louse Canyon***		e		--	--
Martin Creek (Nev.)		e		--	--
Merritt Mountain (Nev.)***		e		--	--
Midas (Nev.)		e		--	--
Mud Flat (Ida.)		No	Rpt.	--	--
Oregon Canyon***		e		--	--
Quinn Ridge (Nev.)***		e		--	--
Red Canyon (Ida.)		e		--	--
Rock Spring	4/28	0	0.0	0.0	0.3
Rodeo Flat (Nev.)	4/24	0	0.0	0.0	1.1
76 Creek (Nev.)***	4/24	18	9.1	0.0	--
Silver City (Ida.)	5/4	20	8.3	0.0	3.9
Silver City (Ida.)***		e		--	--
Silvies		e		--	--
Silvies***		e		--	--
Silvies Pillow		e		--	--
South Mountain #2 (Ida.)	4/30	18	8.8	0.0	7.1
Stag Mountain (Nev.)***		e		--	--
Stinking Water	5/1	0	0.0	--	0.0
Succor Creek (Ida.)***		e		--	--
Taylor Canyon (Nev.)	4/24	0	0.0	0.0	0.1
Toe Jam (Nev.)***		e		--	--
Tremewan Ranch (Nev.)	4/24	0	0.0	--	--
Triangle (Ida.)***		No	Rpt.		
Trout Creek***		e		--	--
"V" Lake		e		--	--
Vaught Ranch (Ida.)***		e		--	--
War Eagle (Ida.)***		e		--	--

SNOW

SNOW		THIS YEAR		PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave C.
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1		No	Rpt.	6.7	40.7
Aneroid Lake #2	4/30	79	36.0	5.0	36.2
Anthony Lake	4/26	58	26.9	9.6	30.4
Bald Mountain (Ore.)***	4/30	60	25.8	0.0	22.5
Beaver Reservoir (Rev.)	5/1	0	0.0	0.0	9.2
Beaver Reservoir Pillow	5/1	--	0.0	--	--
Big Sheep***	4/30	48	22.0	0.0	24.5
Blue Mtn. Summit	4/25	0	0.0	0.0	1.7
Bourne	4/27	9	3.4	0.0	--
Bourne Pillow	4/27	24	10.0	0.0	--
Bourne Pillow	4/27	--	13.3	--	--
County Line	5/1	0	0.0	0.0	0.4
Dooley Mountain	4/27	0	0.0	0.0	2.1
Eilertson Meadows	4/25	10	3.5	0.0	4.7
Eilertson Mdw. Pillow	4/25	8	3.0	--	--
Eldorado Pass	4/28	0	0.0	0.0	0.0 b
Gold Center	4/25	T	0.1	0.0	4.4
Gold Center Pillow	4/25	--	0.0	--	--
Goodrich Lake		e		0.0	38.5
Little Alps	4/26	30	10.5	0.9	13.7 b
Little Antone	4/26	0	0.0	0.0	0.0
Little Antone Alt.	4/26	0	0.0	0.0	--
Lucky Strike	4/29	11	4.1	0.0	9.2 b
Lucky Strike Pillow	4/29	--	0.0	0.0	--
Meacham	4/25	0	0.0	0.0	1.8
Mirror Lake***	4/30	77	81.4	20.6	79.3
Moss Spring	4/30	54	23.2	6.8	23.3
Schneider Meadow	4/30	56	28.4	0.0	25.4 b
Schneider Meadow Pillow	4/30	--	18.8	--	--
Schoolmarm	5/1	0	0.0	0.0	0.1 b
Standley***	4/30	98	42.1	9.4	35.3
Taylor Green	4/30	22	9.6	0.0	12.8 b
Taylor Green Pillow	4/30	--	0.0	--	--
Tipton	4/25	0	0.0	0.0	1.8
Tipton Snow Pillow	4/25	18	7.5	0.0	--
Tipton Snow Pillow	4/25	--	10.0	--	--
Tollgate	4/25	24	11.2	0.0	19.2
TV Ridge***	4/30	57	26.2	1.1	25.2
West Eagle Meadows***	4/30	50	22.0	0.0	--
Wolf Creek		e		--	--
Wolf Creek Pillow		e		--	--
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	4/29	0	0.0	0.0	2.8
Arbuckle Mtn. Pillow	4/29	33	13.6	--	--
Arbuckle Mtn. Pillow	4/29	--	16.8	6.3	--
Blue Mountain Camp	4/25	0	0.0	0.0	5.1 b
Bowman Springs Pillow	4/29	0	0.0	0.0	--
Bowman Springs Pillow	4/29	--	0.0	0.0	--
Butte Creek Summit	5/1	0	0.0	0.0	--
Emigrant Springs	4/25	0	0.0	0.0	0.4
Emigrant Springs Pillow	4/25	--	0.0	--	--
High Ridge	4/27	40	18.2	0.8	--
Lucky Strike	4/29	11	4.1	0.0	9.2 b
Lucky Strike Pillow	4/29	--	0.0	0.0	--
Meacham	4/25	0	0.0	0.0	1.8
Tollgate	4/25	24	11.2	0.0	19.2

BASIC DATA SUPPLEMENT 1

MAY 1, 1978

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. C
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	4/26	58	26.9	9.6	30.4
Arbuckle Mountain	4/29	0	0.0	0.0	2.8
Arbuckle Mountain Pillow	4/29	33	13.6	--	--
Arbuckle Mountain Pillow	4/29	--	16.8	6.3	--
Blue Mountain Springs	4/28	11	4.7	0.0	10.2
Blue Mt. Springs Pillow		No	Rpt.		
Blue Mt. Summit	4/25	0	0.0	0.0	1.7
Butte Creek Summit	5/1	0	0.0	0.0	--
Derr		e		--	--
Gold Center	4/25	T	0.1	0.0	4.4
Gold Center Pillow	4/25	--	0.0	--	--
Indian Creek Butte***		e		--	--
Izee Summit	4/28	0	0.0	0.0	1.9
Lucky Strike	4/29	11	4.1	0.0	9.2
Lucky Strike Pillow	4/29	--	0.0	0.0	--
Marks Creek	5/1	0	0.0	0.0	0.0
Ochoco Meadows		e		--	--
Olive Lake***	4/25	37	15.9	4.3	26.6
Schoolmarm	5/1	0	0.0	0.0	0.1
Snow Mountain		e		--	--
Snow Mt. Pillow		e		--	--
Starr Ridge	4/28	0	0.0	0.0	0.4
Tipton	4/25	0	0.0	0.0	1.8
Tipton Snow Pillow	4/25	18	7.5	0.0	--
Tipton Snow Pillow	4/25	--	10.0	--	--
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	4/28	64	29.8	4.8	--
Caldwell Ranch		e		--	--
Cascade Summit	4/28	19	8.0	6.1	24.8
Chemult Alternate	4/27	0	0.0	0.0	--
Derr		e		--	--
Hogg Pass	4/25	41	16.9	11.4	41.3
Hogg Pass Pillow		No	Rpt.		
Hungry Flat	4/27	0	0.0	0.0	0.0
Irish-Taylor Pillow	4/27	63	24.5	14.0	--
Irish-Taylor Pillow	4/27	--	19.0	--	--
Lionshead***	4/28	0	0.0	0.0	--
Marks Creek	5/1	0	0.0	0.0	0.0
New Crescent Lake	4/26	0	0.0	0.0	4.4
New Dutchman Flat #2	4/27	84	35.2	14.6	54.0
Ochoco Meadows		e		--	--
Racing Creek	4/28	3	1.2	0.0	--
Snow Mountain		e		--	--
Snow Mt. Pillow		e		--	--
Summit Lake Pillow	4/26	77	28.0	17.8	--
Summit Lake Pillow	4/26	--	30.4	13.3	--
Tamarack		e		--	--
Tangent	4/27	10	5.1	0.0	12.3
Three Creek Butte	4/30	0	0.0	0.0	1.6
Three Creek Meadow	4/28	1	0.5	0.0	13.7
Three Creek Mdw. Pillow	4/28	22	9.4	0.0	--
Waldo Lake		e		--	--
Whitewater Meadow	4/28	0	0.0	0.0	--

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave C
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows		e		--	--
Clear Lake	4/28	0	0.0	0.0	5.0
Clear Lake (Experimental)	4/28	0	0.0	0.0	9.7 b
Greenpoint Res.		e		--	--
Greenpoint Res. Pillow		e		--	--
Mt. Hood Test Site	4/27	108	49.8	28.4	67.6
Mud Ridge Pillow	4/28	0	0.0	10.6	--
Mud Ridge Pillow	4/28	--	0.0	7.3	--
Red Hill		e		--	--
Red Hill Pillow		e		--	--
Still Creek	4/28	0	0.0	6.2	20.1
Switchback		e		--	--
Tilly Jane		e		--	--
Umbrella Falls	4/29	101	49.0	29.2	70.7 b
WILLAMETTE WATERSHEDS					
Cascade Summit	4/28	19	8.0	6.1	24.8
Champion	4/27	28	12.0	10.8	26.9
Clackamas Lake		e		--	--
Clear Lake	4/28	0	0.0	0.0	5.0
Clear Lake (Expt.)	4/28	0	0.0	0.0	9.7
Dead Horse Grade	4/29	0	0.0	0.1	11.0 b
Detroit (Town)		e		--	--
Detroit Dam		e		--	--
Golden Curry Creek	4/27	0	0.0	0.0	1.9
Hogg Pass	4/24	41	16.9	11.4	41.3
Hogg Pass Pillow		No	Rpt.		
Jump-Off-Joe Pillow	4/28	--	0.0	--	--
Lake Harriet	5/1	0	0.0	0.0	--
Laurel Mountain	5/1	0	0.0	--	--
Laying Creek	4/27	0	0.0	--	0.0
Lookout Point Dam	4/28	0	0.0	--	--
Lost Creek Ranch		e		--	--
Lund Park	4/27	0	0.0	--	0.0 b
Marion Forks	4/28	0	0.0	0.0	5.0 b
Marion Forks Pillow		No	Rpt.		
Marys Peak (Rev.)		e		--	--
Mc Credie Springs	4/28	0	0.0	--	0.0
McKenzie	4/29	40	19.4	20.0	44.9
McKenzie Bridge		e		--	0.0
Mill City		e		--	0.0
Mt. Hood Test Site	4/27	108	49.8	28.4	67.6
Oakridge	4/28	0	0.0	--	--
Peavine Ridge Pillow	4/27	--	0.0	0.0	11.6 b
Railroad Overpass	4/28	0	0.0	0.0	0.0
Saddle Mountain Pillow	5/1	--	0.0	0.0	--
Salt Creek Falls	4/28	0	0.0	1.7	9.6
Santiam Junction	4/28	0	0.0	0.0	13.3
Santiam Junction Pillow	4/28	--	0.0	--	--
Seine Creek Pillow	5/1	--	0.0	0.0	--
Still Creek	4/28	0	0.0	6.2	20.1
Summit Lake Pillow	4/26	77	28.0	17.8	--
Summit Lake Pillow	4/26	--	30.4	13.3	--
Timothy Lake	5/1	0	0.0	0.0	10.7
Valsetz Summit	5/1	0	0.0	--	--
Vida		e		--	0.0
Waldo Lake		e		--	--
Weaver Creek	4/27	0	0.0	0.0	0.0
White Branch Slide	4/29	0	0.0	0.0	0.4
Whitewater Bridge	4/28	0	0.0	0.0	0.0

BASIC DATA SUPPLEMENT 1

MAY 1, 1978

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches) Last Yr. Ave. C	

ROGUE, UMPQUA WATERSHEDS					
Althouse		e	--	--	
Annie Spring	4/28	90	43.2	2.6	44.4
Beaver Dam Creek	5/1	0	0.0	0.0	7.3
Big Red Mountain		e	--	--	
Billie Creek Divide	4/25	14	5.9	1.5	12.0 b
Billie Creek Div. Pillow	4/25	12	5.0	--	--
Billie Creek Div. Pillow	4/25	--	7.3	2.0	--
Caliban	4/27	84	37.0	7.0	39.4
Caliban (Alternate)	4/27	76	31.2	8.0	--
Champion	4/27	28	12.0	10.8	26.9
Cold Springs Camp	4/24	64	26.0	8.2	--
Cold Spgs. Camp Pillow	4/24	30	13.2	--	--
Cold Spgs. Camp Pillow	4/24	--	14.7	--	--
Deadwood Junction	5/1	0	0.0	0.0	2.8
Diamond-Crater Summit (Rev.)	4/26	56	22.2	4.4	29.9 b
Diamond Lake	4/26	20	8.4	0.7	16.7
Fish Lake	4/25	0	0.0	0.0	6.2 b
Fourmile Lake	4/25	35	10.4	2.4	19.7 b
Fourmile Lake Pillow	4/25	56	26.0	--	--
Fourmile Lake Pillow	4/25	--	27.7	--	--
Grayback Peak		e	--	--	
Howard Prairie Reservoir	5/1	0	0.0	0.0	2.4
Hyatt Prairie Reservoir	5/1	0	0.0	0.0	--
King Mountain #1	4/28	0	0.0	0.0	5.5
King Mountain #2	4/28	0	0.0	0.0	3.1
King Mountain #3	4/28	0	0.0	0.0	0.0
King Mountain #4	4/28	0	0.0	0.0	0.0
King Mountain #5	4/28	0	0.0	0.0	0.0
King Mountain #6	4/28	0	0.0	0.0	0.0
Little Red Mountain		e	--	--	
Mt. Ashland Switchback	4/27	80	33.5	6.6	37.6
Mule Creek	4/28	0	0.0	0.0	--
North Umpqua	4/28	0	0.0	0.0	4.6 b
Page Mountain		e	--	--	
Park Headquarters	4/28	121	55.6	14.2	61.2
Red Butte #1	4/27	0	0.0	1.8	11.7
Red Butte #2	4/27	0	0.0	0.0	3.7 b
Red Butte #3	4/27	0	0.0	0.0	1.2 b
Red Butte #4	4/27	0	0.0	0.0	0.0
Red Butte #5	4/27	0	0.0	0.0	0.0
Red Butte #6	4/27	0	0.0	0.0	0.0
Seven Mile		e	--	--	
Seven Mile Pillow		e	--	--	
Silver Burn	4/29	0	0.0	0.0	3.3
Siskiyou Summit (Rev.)	4/26	0	0.0	0.0	--
Ski Bowl Road	4/27	56	23.2	0.8	25.4
South Fork Canal	4/29	0	0.0	0.0	0.0
Trap Creek	4/28	0	0.0	0.0	4.2

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches) Last Yr. Ave. C	

KLAMATH WATERSHEDS					
Annie Spring	4/28	90	43.2	2.6	44.4
Billie Creek Divide	4/25	14	5.9	1.5	12.0
Billie Creek Div. Pillow	4/25	12	5.0	--	--
Billie Creek Div. Pillow	4/25	--	7.3	2.0	--
Chemult (Alternate)	4/27	0	0.0	0.0	--
Chiloquin (PP&L)		No	Rpt.		
Cold Springs Camp	4/24	64	26.0	8.2	--
Cold Springs Camp Pillow	4/24	30	13.2	--	--
Cold Springs Camp Pillow	4/24	--	14.7	--	--
Crazyman Flat***	4/25	10	4.0	0.0	5.4
Crowder Flat (Calif.)		e	--	--	--
Crystal (PP&L)		No	Rpt.		
Diamond-Crater Summit (Rev.)	4/26	56	22.2	4.4	29.9
Dog Hollow***		e	--	--	--
Finley Corrals***	4/25	15	6.0	0.0	9.0
Fort Klamath (PP&L)		No	Rpt.		
Fourmile Lake	4/25	35	10.4	2.4	19.7 b
Fourmile Lake Pillow	4/25	56	26.0	--	--
Fourmile Lake Pillow	4/25	--	27.7	2.9	--
Gerber		e	--	--	--
Harriman (PP&L)		No	Rpt.		
Howard Prairie Reservoir	5/1	0	0.0	0.0	2.4
Hyatt Prairie Reservoir	5/1	0	0.0	0.0	--
Kirk (PP&L)		No	Rpt.		
Park Headquarters	4/28	121	55.6	14.2	61.2
Quartz Mountain	4/27	0	0.0	0.0	0.5
Seven Mile		e	--	--	--
Seven Mile Pillow		e	--	--	--
State Line (Calif.)***		e	--	--	--
Strawberry	4/27	0	0.0	0.0	1.4 b
Strawberry***	5/1	0	0.0	--	--
Summer Rim		e	--	--	--
Summer Rim***	4/25	33	13.2	0.1	15.6
Summer Rim Pillow		e	--	--	--
Sycan Flat***		e	--	--	--
Taylor Butte	4/25	0	0.0	0.0	0.7 b
Taylor Butte Pillow		No	Rpt.		

BASIC DATA SUPPLEMENT 1

MAY 1, 1978

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. C

LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)	4/28	17	6.6	0.0	4.8
Bald Mountain (Nev.)***		e		--	--
Bear Flat Meadow***		e		--	--
Camas Creek #1	4/27	0	0.0	0.0	3.6
Camas Creek #2	4/27	6	2.4	--	--
Cedar Pass (Calif.)	4/28	39	16.7	0.0	11.1
Colvin Creek***		e		--	--
Cox Flat***		e		--	--
Crowder Flat (Calif.)		e		--	--
Dismal Swamp (Calif.)***	4/26	58	24.5	--	--
Dismal Swamp (Cal.)Alt.***	4/26	77	32.5	--	--
Finley Corrals***	4/25	15	6.0	0.0	9.0
Hart Mountain***		e		--	--
Little Bally Mtn.(Nev.)***		e		--	--
Mt. Bidwell (Calif.)	4/28	71	31.3	--	--
North Star (Calif.)		e		--	--
Patton Meadows***	4/25	33	13.2	0.0	13.3
Quartz Mountain	4/27	0	0.0	0.0	0.5
Rogger Meadows***		e		--	--
Sherman Valley***		e		--	--
Silver Creek		e		--	--
State Line (Calif.)***		e		--	--
Strawberry	4/27	0	0.0	0.0	1.4 ^b
Strawberry***	5/1	0	0.0	--	--
Summer Rim		e		--	--
Summer Rim***	4/25	33	13.2	0.1	15.6
Summer Rim Pillow		e		--	--
Sycan Flat***		e		--	--

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. C

HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	4/28	11	4.7	0.0	10.2
Blue Mtn. Springs Pillow		No Rpt.	--	--	--
Buck Pasture***		e		--	--
Buckskin Lake***		e		--	--
Call Meadows***		e		--	--
Delintment Lake		e		--	--
Denio Creek***		e		--	--
Disaster Peak (Nev.)		e		--	--
Emigrant Butte		e		--	--
Fish Creek		e		--	--
Fish Creek***		e		--	--
Fish Creek Pillow		e		--	--
Hart Mountain***		e		--	--
Idlewild Camp Alternate	4/28	0	0.0	0.0	--
Izee Summit	4/28	0	0.0	0.0	1.9
Lake Creek R.S.		e		--	--
Lake Creek R.S. Pillow	4/28	--	0.0	--	--
Oregon Canyon***		e		--	--
Rock Spring	4/28	0	0.0	0.0	0.3 ^b
Silvies		e		--	--
Silvies***		e		--	--
Silvies Pillow		e		--	--
Snow Mountain		e		--	--
Snow Mountain Pillow		e		--	--
Starr Ridge	4/28	0	0.0	0.0	0.4
Stinking Water	5/1	0	0.0	0.0	0.0
Trout Creek***		e		--	--
"V" Lake		e		--	--

LOWER COLUMBIA WATERSHEDS

Blazed Alder		No Rpt.	--	--	--
Mt. Hood Test Site	4/27	108	49.8	28.4	67.6
Mud Ridge Pillow	4/28	0	0.0	10.6	--
Mud Ridge Pillow	4/28	--	0.0	7.3	--
North Fork Reservoir	5/1	0	0.0	14.5	--
Still Creek	4/28	0	0.0	6.2	20.1

*** Aerial reading.

T Trace

(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 2

MAY 1, 1978

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average ^c
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	1			--
Big Bend (Nev.)	6700	48	16.7	1			15.6
Blue Mountain Spring	5900	42	16.9	1		7.9	--
Mud Flat (Ida.)	5500	48	12.8	1			
Rodeo Flat (Nev.)	6800	42	11.0	1			9.8
Taylor Canyon (Nev.)	6200	48	15.1	1			14.0
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	4/25	16.0		14.8
Dooley Mountain	5430	36	9.2	4/27	7.6	2.6	6.8
Emigrant Springs	3925	48	22.3	4/25	19.6	15.9	--
Ladd Summit	3730	48	18.9	4/26	13.2	9.5	12.3
Moss Springs	5850	36	25.8	4/30	14.4	15.9	15.9
Tollgate	5070	48	23.6	4/25	17.4	18.3	19.0
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/28	13.5	10.8	13.5
Emigrant Springs	3925	48	22.3	4/25	19.6	15.9	--
Tollgate	5070	48	23.6	4/25	17.4	18.3	19.0
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	4/28	13.5	10.8	13.5
Blue Mountain Spring	5900	42	16.9	4/28	12.6	7.9	13.1
Blue Mountain Summit	5100	36	16.8	4/25	16.0		14.8
Derr	5670	24	9.0	1			--
Marks Creek	4540	36	14.1	4/28	12.4	10.3	13.3
Snow Mountain	6300	48	16.7	1			--
Starr Ridge	5150	36	10.6	4/28	10.6	8.8	10.4
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	1			--
Marks Creek	4540	36	14.1	4/28	12.4	10.3	13.3
Snow Mountain	6300	48	16.7	1			--
KLAMATH WATERSHEDS							
Quartz Mountain	5230	48	15.3	4/27	9.9	6.8	9.5
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	4/27	12.3	9.9	13.1
Quartz Mountain	5230	48	15.3	4/27	9.9	6.8	9.5
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	4/28	12.6	7.9	13.1
Silvies	6900	48	16.4	1			--
Snow Mountain	6300	48	16.7	1			--
Starr Ridge	5150	36	10.6	4/28	10.6	8.8	10.4
Willow-Bald	5000	24	6.6	4/28	6.6	5.2	6.1
1 Not Scheduled							

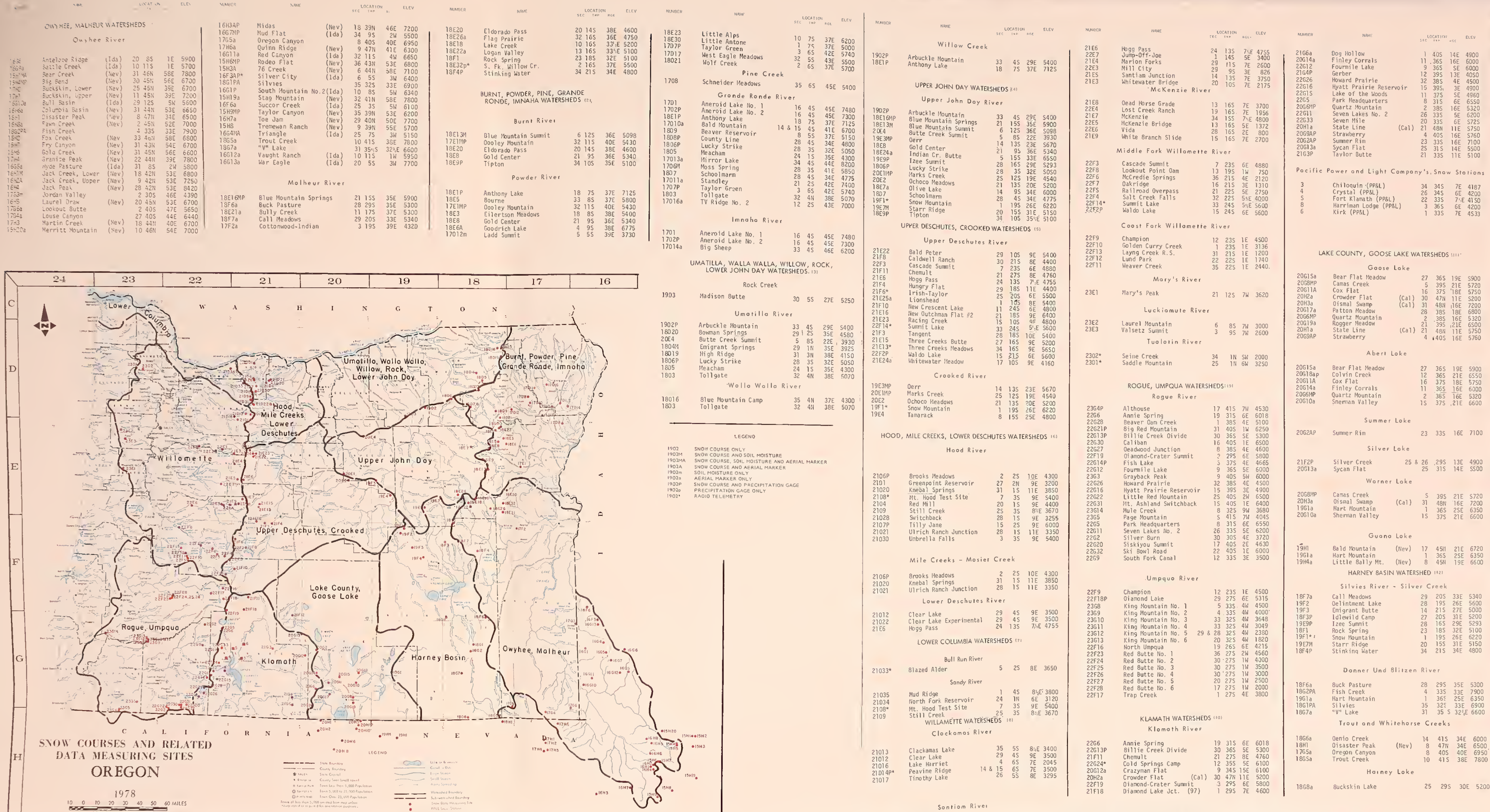
(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

BASIC DATA SUPPLEMENT 3

MAY 1, 1978

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average ^c
Beaver Reservoir (Union County) *	5150	From 3/27 To 5/1	3.00"	--	
Billie Creek Divide (Jackson County) *	5300	From 3/30 To 4/25	3.60"	2.64"	
Bourne (Baker County) *	5800	From 3/31 To 4/27	3.60"	--	
Bowman Spring (Union County) *	4580	From 3/28 To 4/30	5.25"	--	
Camas Creek #1 (Lake County)	5825	From 3/30 To 4/27	5.40"	0.80"	
Cold Springs (Klamath County) *	6100	From 3/28 To 4/24	3.60"	--	
Eilertson Meadow (Baker County) *	5400	From 3/27 To 4/25	3.84"	--	
Emigrant Springs (Umatilla County) *	3925	From 3/28 To 4/25	5.40"	--	
Gold Center (Grant County) *	5340	From 3/27 To 4/25	3.96"	--	
High Ridge (Umatilla County) *	4150	From 3/29 To 4/27	4.68"	--	
Irish Taylor (Deschutes County) *	5500	From 3/29 To 4/27	5.76"	--	
Lucky Strike (Umatilla County) *	5050	From 3/28 To 4/30	4.00"	1.50"	
Marks Creek (Crook-Wheeler Cos.)	4540	From 3/31 To 4/28	2.50"	0.80"	
Mt. Hood Test Site (Clackamas County) *	5555	From 3/30 To 4/27	10.44"	--	
Quartz Mt. Summit (Lake County)	6300	From 3/29 To 4/27	5.45"	0.20"	
Schneider Meadows (Baker County) *	5400	From 3/27 To 4/30	8.88"	--	
Seine Creek (Washington County) *	2150	From 3/29 To 4/28	4.90"	1.10"	
Strawberry (Lake County)	5760	From 3/25 To 4/27	6.00"	1.20"	
Summit Lake (Klamath County) *	5600	From 3/28 To 4/26	6.96"	--	
Taylor Butte (Klamath County)	5040	From 3/31 To 4/25	2.28"	0.36"	
Taylor Green (Union County) *	5800	From 3/27 To 4/30	7.80"	0.00"	
Tipton (Baker County) *	5100	From 3/27 To 4/25	2.04"	1.44"	
* SNOTEL Reading					
(a) Estimated. (b) 1958-72 adjusted average. (c) 1958-72, 15 year average (d) Corrected to natural flow. (e) Not scheduled.					



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon Department Of Water Resources
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
- Department of National Defense
 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale - Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- The Crag Rats, Hood River, Oregon

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SOIL CONSERVATION SERVICE
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*"The Conservation of Water begins
with the Snow Survey"*

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